WST93AUSA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of	) Group Art Unit:
	)
Blaszczyk-Thurin et al	) Examiner:
	)
Appln. No. 09/831,047	)
	)
Filed: May 3, 2001	)
	)
For: COMPOSITIONS AND METHODS	)
FOR TREATMENT OF CANCER	) October 16, 2001

Assistant Commissioner for Patents
Washington, DC 20231

AMENDMENT AND STATEMENT PURSUANT TO 37 CFR §1.821(f) and (g)

Pursuant to the attached notice received from the U.S. Patent and Trademark Office that the computer-readable diskette containing the "Sequence Listing" as submitted does not comply with the requirements of 37 CFR §1.822 and/or 1.832, Applicants herewith submit a substitute Sequence Listing in computer readable form and a substitute paper copy of the Sequence Listing as required by 37 CFR §1.821-1.825.

Please enter the substitute computer readable form and attached substitute paper copy of the Sequence Listing into this application.

EXPRESS MAIL NO. ET 033633632 US

As required by 37 CFR §1.821(f), this statement affirms that to the best of my knowledge and belief that the Sequence Listing information recorded in the substitute computer readable form is identical to the substitute paper copy of the Sequence Listing. As required by 37 CFR §1.821(g), this statement affirms that to the best of my knowledge and belief this substitute Sequence Listing presents no new matter to the application as filed.
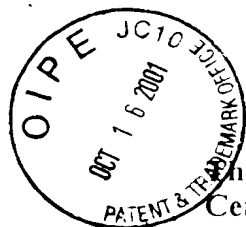
Respectfully submitted,

HOWSON AND HOWSON
Attorneys for the Applicants

By _____
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Spring House Corporate Center
Box 457
Spring House, PA 19477
(215) 540-9200
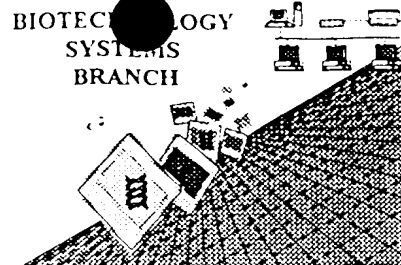
RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/831,047_

Source: _PCT/09_

Date Processed by STIC: _5/21/2001_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/831,047

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics / Wrapped Aminos — The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 ____ Invalid Line Length — The rules require that a line **not exceed** 72 characters in length. This includes white spaces.

3 ____ Misaligned Amino Numbering — The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.

4 ____ Non-ASCII — The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**

5 ____ Variable Length — Sequence(s) ____ contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 ____ PatentIn 2.0 "bug" — A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7 ____ Skipped Sequences (OLD RULES) — Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

8 ____ Skipped Sequences (NEW RULES) — Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 ____ Use of n's or Xaa's (NEW RULES) — Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.

10 ____ Invalid <213> Response — Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence

11 ____ Use of <220> — Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12 ____ PatentIn 2.0 "bug" — Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/831,047
DATE: 05/21/2001
TIME: 08:40:08

Input Set : A:\sequencelst.txt
Output Set: N:\CRF3\05212001\I831047.raw

4 <110> APPLICANT: The Wistar Institute of Anatomy and Biology
5   The Trustees of the University of Pennsylvania
6   Blaszczyk-Thurin, Magdalena
7   Kieber-Emmons, Thomas
9 <120> TITLE OF INVENTION: Compositions and Methods For Treatment of Cancer
11 <130> FILE REFERENCE: WST93PCT
--> 13 <140> CURRENT APPLICATION NUMBER: US/09/831,047
--> 14 <141> CURRENT FILING DATE: 2001-05-03
16 <150> PRIOR APPLICATION NUMBER: 60/107,478
17 <151> PRIOR FILING DATE: 1998-11-06
19 <160> NUMBER OF SEQ ID NOS: 121
21 <170> SOFTWARE: PatentIn Ver. 2.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 12
25 <212> TYPE: PRT
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence:
30   peptido-mimetic of a Lewis antigen
32 <400> SEQUENCE: 1
33 Asp Leu Trp Asp Trp Val Val Gly Lys Pro Ala Gly
34 1   5   10
37 <210> SEQ ID NO: 2
38 <211> LENGTH: 12
39 <212> TYPE: PRT
40 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: Description of Artificial Sequence:
44   peptido-mimetic of a Lewis antigen
46 <400> SEQUENCE: 2
47 Asp Ala Trp Asp Trp Val Val Gly Lys Pro Ala Gly
48 1   5   10
51 <210> SEQ ID NO: 3
52 <211> LENGTH: 12
53 <212> TYPE: PRT
54 <213> ORGANISM: Artificial Sequence
56 <220> FEATURE:
57 <223> OTHER INFORMATION: Description of Artificial Sequence:
58   peptido-mimetic of a Lewis antigen
60 <400> SEQUENCE: 3
61 Asp Asp Trp Asp Trp Val Val Gly Lys Pro Ala Gly
62 1   5   10
65 <210> SEQ ID NO: 4
66 <211> LENGTH: 12
67 <212> TYPE: PRT
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:

          Input Set : A:\sequencelst.txt
          Output Set: N:\CRF3\05212001\I831047.raw

71 <223> OTHER INFORMATION: Description of Artificial Sequence:
72   peptido-mimetic of a Lewis antigen
74 <400> SEQUENCE: 4
75 Asp Tyr Trp Asp Trp Val Val Gly Lys Pro Ala Gly
76   1   5   10
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 12
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Description of Artificial Sequence:
86   peptido-mimetic of a Lewis antigen
88 <400> SEQUENCE: 5
89 Asp Glu Trp Asp Trp Val Val Gly Lys Pro Ala Gly
90   1   5   10
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 12
95 <212> TYPE: PRT
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Description of Artificial Sequence:
100   peptido-mimetic of a Lewis antigen
102 <400> SEQUENCE: 6
103 Asp Lys Trp Asp Trp Val Val Gly Lys Pro Ala Gly
104   1   5   10
107 <210> SEQ ID NO: 7
108 <211> LENGTH: 12
109 <212> TYPE: PRT
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <223> OTHER INFORMATION: Description of Artificial Sequence:
114   peptido-mimetic of a Lewis antigen
116 <400> SEQUENCE: 7
117 Asp Arg Trp Asp Trp Val Val Gly Lys Pro Ala Gly
118   1   5   10
121 <210> SEQ ID NO: 8
122 <211> LENGTH: 12
123 <212> TYPE: PRT
124 <213> ORGANISM: Artificial Sequence
126 <220> FEATURE:
127 <223> OTHER INFORMATION: Description of Artificial Sequence:
128   peptido-mimetic of a Lewis antigen
130 <400> SEQUENCE: 8
131 Asp Ser Trp Asp Trp Val Val Gly Lys Pro Ala Gly
132   1   5   10
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 12
137 <212> TYPE: PRT
138 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING
DATE: 05/21/2001
PATENT APPLICATION: US/09/831,047
TIME: 08:40:08

Input Set : A:\sequencelst.txt
Output Set: N:\CRF3\05212001\I831047.raw

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140 <220> FEATURE:
141 <223> OTHER INFORMATION: Description of Artificial Sequence:
142      peptido-mimetic of a Lewis antigen
144 <400> SEQUENCE: 9
145 Asp Leu His Asp Trp Val Val Gly Lys Pro Ala Gly
146   1                 5                 10
149 <210> SEQ ID NO: 10
150 <211> LENGTH: 12
151 <212> TYPE: PRT
152 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Description of Artificial Sequence:
156      peptido-mimetic of a Lewis antigen
158 <400> SEQUENCE: 10
159 Asp Leu Tyr Asp Trp Val Val Gly Lys Pro Ala Gly
160   1                 5                 10
163 <210> SEQ ID NO: 11
164 <211> LENGTH: 12
165 <212> TYPE: PRT
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Description of Artificial Sequence:
170      peptido-mimetic of a Lewis antigen
172 <400> SEQUENCE: 11
173 Asp Leu Phe Asp Trp Val Val Gly Lys Pro Ala Gly
174   1                 5                 10
177 <210> SEQ ID NO: 12
178 <211> LENGTH: 12
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
182 <220> FEATURE:
183 <223> OTHER INFORMATION: Description of Artificial Sequence:
184      peptido-mimetic of a Lewis antigen
186 <400> SEQUENCE: 12
187 Asp Leu Met Asp Trp Val Val Gly Lys Pro Ala Gly
188   1                 5                 10
191 <210> SEQ ID NO: 13
192 <211> LENGTH: 12
193 <212> TYPE: PRT
194 <213> ORGANISM: Artificial Sequence
196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence:
198      peptido-mimetic of a Lewis antigen
200 <400> SEQUENCE: 13
201 Asp Leu Ala Asp Trp Val Val Gly Lys Pro Ala Gly
202   1                 5                 10
205 <210> SEQ ID NO: 14
206 <211> LENGTH: 12
207 <212> TYPE: PRT
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208 <213> ORGANISM: Artificial Sequence
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Description of Artificial Sequence:
212         peptido-mimetic of a Lewis antigen
214 <400> SEQUENCE: 14
215 Asp Leu Glu Asp Trp Val Val Gly Lys Pro Ala Gly
216   1               5                 10
219 <210> SEQ ID NO: 15
220 <211> LENGTH: 12
221 <212> TYPE: PRT
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence:
226         peptido-mimetic of a Lewis antigen
228 <400> SEQUENCE: 15
229 Asp Leu Asp Asp Trp Val Val Gly Lys Pro Ala Gly
230   1               5                 10
233 <210> SEQ ID NO: 16
234 <211> LENGTH: 12
235 <212> TYPE: PRT
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Description of Artificial Sequence:
240         peptido-mimetic of a Lewis antigen
242 <400> SEQUENCE: 16
243 Asp Leu Lys Asp Trp Val Val Gly Lys Pro Ala Gly
244   1               5                 10
247 <210> SEQ ID NO: 17
248 <211> LENGTH: 12
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Description of Artificial Sequence:
254         peptido-mimetic of a Lewis antigen
256 <400> SEQUENCE: 17
257 Asp Leu Arg Asp Trp Val Val Gly Lys Pro Ala Gly
258   1               5                 10
261 <210> SEQ ID NO: 18
262 <211> LENGTH: 12
263 <212> TYPE: PRT
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence:
268         peptido-mimetic of a Lewis antigen
270 <400> SEQUENCE: 18
271 Asp Leu Ser Asp Trp Val Val Gly Lys Pro Ala Gly
272   1               5                 10
275 <210> SEQ ID NO: 19
276 <211> LENGTH: 12
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RAW SEQUENCE LISTING   DATE: 05/21/2001
PATENT APPLICATION: US/09/831,047   TIME: 08:40:08

                Input Set : A:\sequencelst.txt
                Output Set: N:\CRF3\05212001\I831047.raw

277 <212> TYPE: PRT
278 <213> ORGANISM: Artificial Sequence
280 <220> FEATURE:
281 <223> OTHER INFORMATION: Description of Artificial Sequence:
282   peptido-mimetic of a Lewis antigen
284 <400> SEQUENCE: 19
285 Asp Leu Trp Glu Trp Val Val Gly Lys Pro Ala Gly
286   1   5   10
289 <210> SEQ ID NO: 20
290 <211> LENGTH: 12
291 <212> TYPE: PRT
292 <213> ORGANISM: Artificial Sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: Description of Artificial Sequence:
296   peptido-mimetic of a Lewis antigen
298 <400> SEQUENCE: 20
299 Asp Leu Trp Ser Trp Val Val Gly Lys Pro Ala Gly
300   1   5   10
303 <210> SEQ ID NO: 21
304 <211> LENGTH: 12
305 <212> TYPE: PRT
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence:
310   peptido-mimetic of a Lewis antigen
312 <400> SEQUENCE: 21
313 Asp Leu Trp Pro Trp Val Val Gly Lys Pro Ala Gly
314   1   5   10
317 <210> SEQ ID NO: 22
318 <211> LENGTH: 12
319 <212> TYPE: PRT
320 <213> ORGANISM: Artificial Sequence
322 <220> FEATURE:
323 <223> OTHER INFORMATION: Description of Artificial Sequence:
324   peptido-mimetic of a Lewis antigen
326 <400> SEQUENCE: 22
327 Asp Leu Trp Val Trp Val Val Gly Lys Pro Ala Gly
328   1   5   10
331 <210> SEQ ID NO: 23
332 <211> LENGTH: 12
333 <212> TYPE: PRT
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Description of Artificial Sequence:
338   peptido-mimetic of a Lewis antigen
340 <400> SEQUENCE: 23
341 Asp Leu Trp Met Trp Val Val Gly Lys Pro Ala Gly
342   1   5   10
345 <210> SEQ ID NO: 24

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<210> 100
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      peptido-mimetic of a Lewis antigen

<400> 100
Asn Leu Arg Pro Lys Tyr Ile Xaa Leu Asp Ala Asp
 1               5               10
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see item 9 on Era Summary Sheet

FYI

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set : A:\sequencelst.txt
Output Set: N:\CRF3\05212001\I831047.raw

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:13 M:270 C: Current Application Number differs, Replaced Application Number
:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
:1419 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:100
:1419 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:100
:1419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
:1573 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:111
:1573 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:111
:1573 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
:1587 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:112
:1587 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:112
:1587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:112
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